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1879.]

[No. 6.

# BULLETIN

OF THE

## American Geographical Society.

*No. 11 West 29th Street.*

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### CONTENTS:

Title-Page and Table of Contents for Vol. XI. of the Society's Journal for 1879 ; List of Officers and Councilors for 1879 ; Charter of Incorporation; Amended Charter; By-Laws; Honorary and Corresponding Members and Fellows; List of Foreign and Domestic Geographical and other Scientific Bodies with which this Society is in Communication; Additions to Library and Map-Rooms during the Year 1879; Transactions of the Society for the Year 1879.

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[NOTE.—Nos. 6, 1, 2, 3, 4 and 5 of the Bulletin for 1879, when joined together in the order named, make Vol. XI. of the Society's Journal.]

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NEW YORK :

PRINTED FOR THE SOCIETY.

1881.

J O U R N A L

OF THE

American Geographical Society

OF

NEW YORK.

M.DCCC.LXXXIX.



VOL. XI.

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NEW YORK:  
PRINTED FOR THE SOCIETY.

# AMERICAN GEOGRAPHICAL SOCIETY.

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- STARLING, Gen. F. A., Paris.
- STEVENS, Henry, LL.D., London.
- STEERE, J. B., Hong-Kong, China.
- VAN BENTHUYSEN, Charles, Albany,  
N. Y.
- VAN CAMPEN, Samuel Richard, London.
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Haven, Conn.
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D. C.
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Washington, D. C.
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Haven, Conn.
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Army, Washington, D. C.
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Washington, D. C.
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Paris, France.
- YOUNG, Jess, F.R.G.S., Wisbeach,  
England.

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CORRECTED TO DECEMBER 31ST, 1879.

Date of Election.	Date of Election.
1859 Arnoux, William H.	1874 Acker, David D.
1859 Arnold, David H. (L. F.)	1874 Avery, Samuel P.
1859 Aymar, William. (L. F.)	1874 Amend, Bernhard G.
1860 Acton, Thomas C.	1874 Ascher, Adolph.
1869 Auchmuty, Richard Tyden.	1874 Adams, Rev. Wm., D.D.
1871 Atterbury, Rev. Wm. Wallace, D.D.	1874 Agnew, John T. (L. F.)
1872 Allen, Horatio M.	1874 Arnold, Richard.
1873 Albert, Halpern.	1874 Allen, Henry Wilder.
1874 Alexander, Junius B.	1874 Amy, Henry.
1874 Arthur, Gen. Chester A.	1874 Agnew, Alexander McL.
1874 Auferman, August.	1874 Adams, Charles Francis.
1874 Auchincloss, Henry B.	1874 Astor, W. W.
	1874 Appleton, John A.

- 1874 Appleton, D. S.  
 1874 Anderson, Henry H.  
 1874 Alsop, William.  
 1875 Amsinck, Gustav.  
 1876 Andrews, Wm. L.  
 1876 Appleton, Nathan.  
 1878 Austin, Charles P.  
 1879 Austin, William.  
 1879 Adams, Oliver.  
 1879 Adams, Mortimer C.  
 1879 Astoin, Felix.  
 1879 Agostini, Joseph.  
 1879 Ashley, Lucius C.  
 1879 Agnew, Cornelius R., M.D.  
 1879 Ashley, Lucien S.  
 1879 Astor, John Jacob. (L. F.)  
  
 1852 Bancroft, George. (L. F.)  
 1852 Barney, Hiram. (L. F.)  
 1853 Brown, James M.  
 1853 Butler, Charles.  
 1856 Baker, Francis. (L. F.)  
 1856 Berry, Richard.  
 1856 Brevoort, J. Carson.  
 1856 Brown, Stewart.  
 1859 Brown, James. (L. F.)  
 1859 Boorman, J. Marcus. (L. F.)  
 1859 Boardman, Andrew.  
 1859 Bernheimer, Isaac.  
 1859 Belmont, August. (L. F.)  
 1859 Barlow, S. L. M.  
 1860 Benedict, Erastus C.  
 1861 Butterfield, Gen. Daniel.  
 1865 Banvard, John. (L. F.)  
 1865 Bellows, Rev. Henry W., D.D.  
 1868 Banks, David.  
 1868 Beckwith, N. M.  
 1868 Bennett, James Gordon.  
 1868 Bernheimer, Adolph.  
 1868 Bernheimer, Simon.  
 1868 Bill, Edward.  
 1868 Blake, Charles F.  
 1868 Brady, John R.  
 1869 Bailey, Jas. Muhlenberg. (L. F.)  
 1869 Banyer, Goldsboro.  
 1869 Bickmore, Prof. A. S.  
 1869 Bierstadt, Albert.  
  
 1870 Butler, Cyrus.  
 1870 Botta, Prof. Vincenzo.  
 1870 Body, John E.  
 1870 Bishop, T. Alston. (L. F.)  
 1870 Bell, George.  
 1872 Bryce, James. (L. F.)  
 1872 Brown, Walston H.  
 1873 Bailey, N. P.  
 1874 Bishop, D. W. (L. F.)  
 1874 Bien, Julius.  
 1874 Beecher, Rev. Henry Ward.  
 1874 Bartlett, Willard.  
 1874 Bissinger, Philip.  
 1874 Barney, Newcomb C.  
 1874 Backus, Henry C.  
 1874 Ballin, Eugène S.  
 1874 Baldwin, Townsend B.  
 1874 Bates, Levi M.  
 1874 Barnes, John S.  
 1874 Barbour, Thomas (L. F.)  
 1874 Bonner, Robert.  
 1874 Bonn, William B.  
 1874 Bjerring, Rev. Nicolas.  
 1874 Barnard, Horace.  
 1874 Barnard, F. A. P., LL.D.  
 1874 Benjamin, John.  
 1874 Butler, Wm. Allen.  
 1874 Bartow, Morey H.  
 1874 Barling, Henry A.  
 1874 Barr, William.  
 1874 Belding, Milo M.  
 1874 Buckley, Rev. Jas. M.  
 1874 Bookstaver, Henry W.  
 1874 Brownson, Lieut. W. H., U.S.N.  
 1875 Barney, Charles T.  
 1875 Bancroft, Benjamin F.  
 1875 Beaman, Charles C., Jr.  
 1875 Bernheimer, J. A.  
 1875 Beckwith, Leonard F.  
 1875 Benjamin, E. B.  
 1875 Bull, Charles S., M. D.  
 1875 Beekman, Gerard.  
 1875 Babcock, Gen. O. E., U.S. Army.  
 1875 Brownell, Silas B.  
 1875 Bergland, Lt. Eric, U.S. Army.  
 1875 Burgess, William J.  
 1875 Brown, Vernon H.

1875 Barnes, William.	1863 Cary, William F. (L F.)
1875 Beste, Henry.	1868 Catlin, N. W. Stuyvesant (L.F.)
1875 Bredt, Ernest.	1868 Cisco, John J.
1875 Bernacki, Charles, M.D.	1868 Chapman, Joseph H.
1875 Bent, Captain Silas.	1869 Cullum, Gen. George W., U. S. Army. (L. F.)
1875 Bedle, Joseph D.	1870 Conklin, William A.
1875 Belknap, Capt. Geo. E., U.S.N.	1872 Corse, Israel.
1875 Bowie, Augustus J., Jr.	1872 Conklin, Eugene E.
1876 Bowne, Richard H.	1872 Crawford, Gen. S. W., U. S. Army.
1876 Burnett, Henry L.	1872 Clark, E. V.
1876 Buell, James.	1872 Cox, Samuel S.
1876 Banks, James L., M.D.	1873 Coster, Charles H.
1876 Baldwin, Commodore Charles H., U.S.N.	1874 Cruickshank, James, LL.D.
1876 Brower, John.	1874 Connery, T. B.
1876 Billings, Frederick.	1874 Cowdrey, N. A.
1876 Bellew, F. H. T.	1874 Curphey, James.
1877 Booth, George.	1874 Campbell, Allan.
1877 Bixby, Robert F.	1874 Church, Col. George E.
1877 Börs, Christian.	1874 Chistern, F. W.
1877 Briggs, Prof. Charles A.	1874 Courtright, Milton.
1877 Blanchard, George R.	1874 Cockcroft, Jacob H. V.
1877 Blatchford, Eliphalet W.	1874 Chickering, Charles F.
1878 Brodhead, Richard.	1874 Comstock, Cornelius.
1878 Bliss, Cornelius N.	1874 Constable, James M.
1878 Brown, G. Melville.	1874 Ceballos, J. M.
1878 Barton, Oliver Grant. (L. F.)	1874 Carter, Walter S.
1878 Brown, Rev. Philip A. H.	1874 Caswell, Wm. H.
1878 Brand, James.	1874 Crerar, John.
1878 Brown, J. Warren.	1874 Crocker, David.
1878 Brown, J. Romaine.	1874 Cruikshank, Edwin A.
1879 Brady, James T.	1874 Crosby, J. Schuyler.
1879 Babcock, Henry C.	1874 Clark, Lot Curran.
1879 Bronson, Theodore B.	1874 Coates, Isaac T., M.D.
1879 Barattoni, C. A.	1874 Cochrane, Capt. Henry Clay, U.S.M.C.
1879 Bowen, Gen. Edmund S.	1874 Colgate, James B.
1852 Colton, Joseph H. (L. F.)	1874 Constantine, Andrew J.
1855 Conkling, Frederick A. (L. F.)	1874 Constantine, John.
1855 Cooper, Peter.	1874 Corning, Erastus.
1856 Cooley, James E. (L. F.)	1874 Cottenet, Francis.
1856 Colgate, Charles C.	1874 Cossitt, Frederick H.
I856 Cooper, Edward.	1874 Coutan, Charles E.
1856 Crooks, Ramsey. (L. F.)	1874 Conyngham, Wm. L.
1856 Curtis, Wm. E.	1874 Crosby, Hiram B.
1862 Cowdin, Eliot C.	

- 1874 Crocker, Geo. A.  
 1874 Crocker, Wm. Baylies.  
 1874 Chickering, George H.  
 1874 Carter, Oliver S.  
 1874 Carhart, Thos. F.  
 1874 Catlin, Julius, Jr.  
 1874 Cabot, Stephen.  
 1874 Colgate, Robert.  
 1874 Curren, Robert.  
 1875 Clendenin, J. W.  
 1875 Cameron, R. W.  
 1875 Cushman, W. F.  
 1875 Colgate, Bowles.  
 1875 Cooper, George C.  
 1875 Champlin, John D., Jr.  
 1875 Cassebeer, Henry A., Jr.  
 1875 Childs, Calvin G.  
 1875 Cone, James B.  
 1875 Chittenden, S. B., Jr.  
 1876 Clarke, W. H.  
 1876 Cullum, Mrs. George W. (L. F.)  
 1876 Constable, Major A. G.  
 1876 Cornell, John B.  
 1876 Curtis, Benj. L.  
 1876 Curtis, Benjamin R.  
 1878 Cornwallis, K.  
 1878 Chisholm, Alexander Robert.  
 1879 Cooper, James G.  
 1879 Church, Simeon E.  
 1879 Clark, G. W. C.  
 1879 Caldwell, Towson.  
 1879 Coddington, Gilbert S.  
 1879 Caldwell, R. A., M. D.  
 1879 Childs, George W.  
 1855 Daly, Chief-Judge C. P. (L. F.)  
 1855 Dunshee, Prof. Henry W.  
 1856 Douglas, Andrew E.  
 1856 Dodge, Wm. E.  
 1856 Dodge, Wm. E., Jr.  
 1856 Detmold, Wm., M.D.  
 1859 Dickerson, E. N.  
 1864 Detmold, Christian E.  
 1866 Darling, Wm. A.  
 1868 Dwight, Prof. Theo. W.  
 1868 Du Chaillu, Paul B.  
 1868 Dennis, Charles. (L. F.)  
 1868 Davies, Henry E.  
 1870 Dash, John B.  
 1870 Davies, Alexander J. (L. F.)  
 1870 Drowne, Henry T.  
 1870 Dinsmore, William B.  
 1871 Daly, Joseph F.  
 1873 De Peyster, Frederick. (L. F.)  
 1873 Delano, Franklin H.  
 1873 Dwight, James F.  
 1874 De Peyster, Gen. J. Watts. (L. F.)  
 1874 Diefendorf, Menzo.  
 1874 Davis, Noah.  
 1874 Dillon, Romaine. (L. F.)  
 1874 Dutilh, E.  
 1874 Downer, Samuel.  
 1874 Decker, Charles A.  
 1874 Delafield, M. L.  
 1874 Dana, Charles A.  
 1874 Draper, Frank E.  
 1874 Devlin, Jeremiah.  
 1874 Davidson, Stratford P.  
 1874 Donohue, Charles.  
 1874 Decker, John J.  
 1874 Del Monte, Leonardo.  
 1874 Du Bois, Wm. A.  
 1874 De Castro, Diego.  
 1874 Delmonico, L.  
 1874 Davis, John G.  
 1874 Davis, John H.  
 1874 Dalrymple, Alexander.  
 1874 Duke, John H.  
 1874 Dunscomb, Richard T.  
 1874 Dun, R. G.  
 1874 Defendorf, Wilson.  
 1875 Darrow, William.  
 1875 Davies, Julien T.  
 1875 Du Bois, Eugene.  
 1875 Donnelly, John J.  
 1875 Daniel, Edwin M.  
 1875 Dodd, Josiah F.  
 1875 Davidson, Charles A.  
 1875 De Peyster, Frederic J. (L. F.)  
 1875 Delafield, Lewis L.  
 1875 Dommerick, L. F.  
 1876 Davis, Gilbert F.

1876 Day, Lieut. Murray S., U.S.N.	1869 Furniss, William.
1876 Drexel, Joseph W.	1869 Forsyth, Rev. John.
1877 Day, Henry M.	1869 Field, Dudley.
1877 Davis, Joseph Beale. (L. F.)	1871 Fließ, Wm. M.
1877 Dorsheimer, William.	1873 Freedman, John J.
1878 Dana, Charles.	1873 Fifthian, Freeman J.
1878 Day, Gen. H., U. S. Army.	1874 Farragut, Loyall.
1878 Di Cesnola, Gen. L. B.	1874 Foshay, James W.
1879 Dahlgren, Charles B.	1874 Fabbri, Egisto P.
1879 Dodge, George E.	1874 Fellows, John P.
1879 Delavan, Edward C.	1874 Francklyn, C. G.
1879 Dana, Samuel B.	1874 Fleet, Oliver S.
	1874 Fatman, Lewis.
1853 Eyre, Henry S. P.	1874 Fabbri, Ernesto G.
1859 Evarts, William M.	1874 Foster, Wm. R.
1864 Evans, Walton W.	1874 Forman, Alexander.
1868 Emmet, Thomas Addis, M.D.	1874 Fox, Baldwin N.
1872 Edwards, Jonathan.	1874 Frothingham, Rev. O. B.
1874 Ernst, C. W.	1874 Fougera, Edmund C.
1874 Eaton, Dorman B.	1874 Frame, Charles P.
1874 Eaton, D. Cady.	1874 Fox, Austen G.
1874 Ewen, John, Jr.	1875 Foulke, Thomas.
1875 Eldridge, Titus B.	1875 Faile, Charles V.
1875 Esterbrook, Richard, Jr.	1875 Fargo, James C.
1875 Ellis, John W.	1875 Fuller, Charles D.
1875 Elliott, John.	1875 Farquhar, Col. Francis U., U. S.
1875 Eimer, Charles.	Army.
1875 Ely, Richard S.	1875 Forster, Robert.
1875 Eads, Captain James B., C.E.	1875 Ford, James B.
1876 Ellers, George Howard.	1875 Foote, Emerson.
1877 Elderkin, John.	1875 Fay, A. Goodrich.
1878 Eno, John C.	1875 Folsom, George W.
1878 Ellis, John, M.D.	1876 Fisk, Gen. Clinton B.
1878 Edson, Franklin.	1877 Fiske, Andrew.
1879 Everett, William.	1877 Flagg, William J.
1879 Earl, Ferdinand P.	1878 Ferris, L. Murray, Jr.
1879 Elliott, Samuel.	1878 Fales, William E. S.
	1879 Fellows, John R.
1854 Field, Cyrus W. (L. F.)	1879 Ferris, Robert M.
1856 Field, David Dudley.	
1856 Field, B. H. (L. F.)	1856 Greenwood, Isaac J.
1857 Fish, Hamilton.	1856 Guernsey, Egbert, M.D.
1859 Fogg, Wm. H. (L. F.)	1857 Greene, John W., M.D. (L. F.)
1860 Field, Rev. H. M.	1859 Griswold, George. (L. F.)
1864 Faile, Thomas H.	1860 Graham, James L. (L. F.)
1868 Frohwein, Theobald.	1868 Gambrill, C. D.

- 1868 Gebhard, Wm. H. (L. F.)  
 1868 Gerry, Elbridge T. (L. F.)  
 1868 Green, Andrew H.  
 1868 Greene, Gen. G. S.  
 1869 Gilbert, Clinton.  
 1870 Graham, Gen. C. K.  
 1872 Gerard, James W.  
 1872 Grinnell, R. M. (L. F.)  
 1873 Gillmore, Gen. Q. A., U.S.A.  
 1873 Gedney, Frederick G.  
 1873 Glaubensklee, Theo. G.  
 1874 Gardner, Hugh.  
 1874 Green, John.  
 1874 Gunther, William Henry.  
 1874 Gunther, F. F.  
 1874 Gibert, Fred. E.  
 1874 Gibbs, Theodore K.  
 1874 Gottsberger, William S.  
 1874 Goodsell, James H.  
 1874 Gomez, Raphael M.  
 1874 Galpen, Horace.  
 1875 Greene, Lieut. F. V., U.S.A.  
 1875 Gordon, Robert.  
 1875 Germond, Wellington.  
 1875 Greene, G. S., Jr., C.E.  
 1875 Garrison, Cornelius K.  
 1875 Gibson, James.  
 1875 Goepf, Charles.  
 1876 Gautier, Dudley G.  
 1877 Gaylord, Augustus.  
 1877 Guleke, H. F., M.D.  
 1878 Gescheidt, Mrs. A.  
 1878 Gillies, James W.  
 1878 Garrison, William R.  
 1879 Graves, Arthur B.  
 1879 Gebhard, Edward.  
 1879 Gay, Joseph E.  
 1856 Hewitt, Abram S.  
 1856 Hunt, Wilson G.  
 1856 Herring, Silas C.  
 1858 Holton, David P., M.D. (L. F.)  
 1859 Henderson, John C.  
 1859 Havemeyer, John C. (L. F.)  
 1864 Hammond, Henry B.  
 1868 Huntington, Daniel. (L. F.)  
 1868 Hurlbert, William H.  
 1868 Hoyt, David.  
 1868 Hoguet, Robert J.  
 1868 Hall, Elial F.  
 1868 Hayes, Isaac I., M.D.  
 1868 Hadden, John A. (L. F.)  
 1868 Hallock, Mrs. Frances.  
 1869 Hutchins, Waldo.  
 1870 Hawkes, Prof. W. Wright.  
 1870 Havens, Charles G.  
 1870 Harrison, Prof. Thomas F.  
 1871 Hamilton, Alexander, Jr.  
 1871 Hand, Clifford A.  
 1872 Hoffman, William B.  
 1872 Hammersley, John W. (L. F.)  
 1872 Hawkins, Dexter A.  
 1872 Holbrook, Levi.  
 1873 Havemeyer, Theo. A.  
 1874 Hamersley, A. Gordon. (L. F.)  
 1874 Hamersley, Louis C. (L. F.)  
 1874 Hancock, Gen. Winfield S., U.S.A.  
 1874 Hay, John.  
 1874 Haldeman, S. S.  
 1874 Hitchcock, Rev. Roswell D., D.D.  
 1874 Havemeyer, Hector C.  
 1874 Hoguet, Henry L.  
 1874 Hoyt, Oliver.  
 1874 Hurlbert, Henry A. (L. F.)  
 1874 Hutton, Benjamin H.  
 1874 Haydock, George G.  
 1874 Haines, John P.  
 1874 Hinton, John H., M.D. (L. F.)  
 1874 Hendricks, M. M.  
 1874 Hawk, Samuel.  
 1874 Hallgarten, Adolphus.  
 1874 Havemeyer, James.  
 1874 Holbrook, E. F.  
 1874 Hoe, Richard M.  
 1874 Harper, Nathan.  
 1874 Hunter, Charles F.  
 1874 Hendricks, Edmund.  
 1874 Hendricks, Joshua.  
 1874 Hawes, James W.  
 1874 Hatch, Rufus.  
 1874 Huntington, C. P.  
 1874 Hunter, Lieut. Edward, U.S.A.

1874 Hoyt, Harlow M.	1852 Jones, John D. (L. F.)
1875 Hubbard, Prof. O. P.	1868 Johnson, Henry W.
1875 Howard, Thomas T., Jr.	1868 Johnson, Hezron A.
1875 Hammond, Wm. A., M.D.	1870 James, Fred'k P.
1875 Houston, Col. D. C., U.S.A.	1871 Jones, Walter R. T.
1875 Heuer, Capt. Wm. H., U.S.A.	1874 Judson, Wm. D.
1875 Howell, Maj. Charles W., U.S.A.	1874 Janssen, Gerhard.
1875 Hoadley, John C.	1874 Jesup, M. K.
1875 Hughes, Wm. H. T.	1874 Jaffray, Edward S.
1875 Hoppenstedt, G. L.	1874 Jenkins, Wm. L.
1875 Hanemann, John F.	1874 James, D. Willis.
1875 Howland, Meredith.	1874 Jameson, Joseph A.
1875 Hyde, Henry B.	1874 Jordan, Conrad N.
1875 Harper, P. J. A.	1874 Jones, George.
1875 Hazen, Gen. W. B., U.S. Army.	1874 Jaffray, Robert.
1875 Harris, Siegmund.	1876 Johnston, James W.
1875 Hun, Leonard G.	1876 Jones, John M.
1876 Heminway, Albert G.	1878 Jones, George H.
1876 Holt, Henry.	1878 Judson, Capt. J. A., C.E.
1876 Hallock, Henry W.	1879 Jay, William.
1876 Halsted, Major Geo. B.	
1876 Hoare, W. Robert.	1854 Kennedy, Robert Lenox.
1876 Holman, Frank E.	1869 Kelly, Eugene.
1876 Hyde, Samuel N.	1870 Kühne, Frederick.
1876 Hoes, Wm. M.	1872 Kendrick, Col. H. L., U.S. Army.
1876 Hatfield, J. B. T.	1873 Kennan, George.
1877 Houghton, Prof. Walter R.	1874 King, Edward.
1878 Howe, George S.	1874 Kearney, Joseph R.
1878 Hermann, Henry.	1874 Kunhardt, Henry R.
1878 Hinman, Wm. K.	1874 Kingsland, Wm. M. (L. F.)
1878 Holden, Horace.	1874 Kidder, Henry P.
1878 Hitchcock, Hiram	1874 Kalbfleisch, Charles H.
1879 Hamilton, William G.	1874 Knoedler, Julius.
1879 Harris, Col. Robert.	1874 Keck, Thomas.
1879 Hodges, George.	1874 Kemp, William.
1879 Hayes, A. A., Jr.	1874 Knower, John.
1879 Hamilton, Capt. F. B., U.S.A.	1874 Kemp, John H.
	1874 King, David, Jr.
1859 Ireland, John B.	1874 King, Lewis.
1874 Isaacs, Isaac S.	1875 Knapp, Herman, M.D.
1874 Ives, Fred'k E.	1876 Knauth, Percival.
1874 Iselin, Adrian, Jr.	1877 King, Clarence.
1879 Inman, William H.	1877 Kane, Gen. Thomas L.
1879 Isham, Charles H.	1878 Kernochan, Jas. Lorillard. (L. F.)
1852 Jay, John. (L. F.)	1879 Kane, S. Nicholson.

1852 Livingston, Cambridge. (L. F.)	1853 Moore, George H. (L. F.)
1857 Low, A. A.	1856 Morgan, E. D.
1859 Lenox, James.	1856 Monroe, Ebenezer.
1859 Lathers, Richard. (L. F.)	1856 Manners, David S.
1868 Lawrence, Abraham R.	1859 MacMullen, John.
1869 Lawrence, John S. (L. F.)	1859 Morrell, Wm. H. (L. F.)
1870 Loew, Frederick W.	1859 Moore, Frank. (L. F.)
1870 Lyman, Edward H. R.	1863 May, Lewis.
1871 Letson, Robert S	1863 Moore, W. H. H. (L. F.)
1871 Larremore, Richard L.	1864 Morton, Levi P.
1871 Lee, Ambrose.	1866 Morris, Robert R.
1872 Libbey, William. (L. F.)	1868 Morrison, Henry.
1873 Lydig, Mrs. P. M.	1868 Moreau, John B.
1874 Lathrop, F. S. (L. F.)	1868 Montgomery, A. G., Jr.
1874 Lauterbach, Edward.	1868 Martin, Isaac P.
1874 Livingston, Robert J. (L. F.)	1868 Marquand, Henry G.
1874 Langdon, Walter. (L. F.)	1868 Marsh, Luther R.
1874 Lorillard, Peter.	1868 MacKellar, William.
1874 Lord, George W. T.	1868 McClure, George.
1874 Lorillard, George L.	1869 Mount, Richard E. (L. F.)
1874 Leavenworth, E. W.	1869 Moore, Henderson.
1874 Livingston, John A.	1870 Marbury, Francis F.
1874 Livingston, Robert E.	1870 Myer, Gen. A. J., U. S. A. (L. F.)
1874 Littlejohn, James.	1870 Murray, D. Colden.
1874 Lawton, Walter E.	1870 Miles, Edward D.
1874 Lawrence, Jos. B.	1872 Myer, F. William.
1874 Leggett, Francis W.	1872 Matthews, Edward. (L. F.)
1874 Le Comte, Joseph.	1872 Marié, Peter. (L. F.)
1874 Lewis, Walter H.	1873 Moore, C. B.
1874 Lawson, Leonidas M.	1874 Morris, Henry L.
1874 Lane, George W.	1874 Mailler, W. H.
1874 Lawrence, Samuel B.	1874 Macy, William H.
1874 Lawrence, Alexander C.	1874 Marble, Manton.
1874 Lawrence, Effingham N.	1874 Morrison, Edward.
1874 Leshner, Stephen R.	1874 Morgan, W. F.
1875 Luff, George.	1874 Montgomery, Thomas H.
1875 Low, Seth.	1874 Miller, Philip S.
1875 Lawrence, George N.	1874 McElligott, Henry R.
1876 Low, A. Augustus.	1874 Mott, Alexander B., M.D.
1876 Lindau, Leopold.	1874 Moir, James.
1877 Lockwood, Le Grand.	1874 Morgan, J. Pierpont. (L. F.)
1877 Lindley, John.	1874 Maclay, Isaac W., C.E.
1877 Latrobe, John H. B.	1874 Myers, John K.
1878 Loubat, J. F., LL.D. (L. F.)	1874 Martin, John M.
1878 Leon, Nestor Ponce de	1874 McAlpin, David H.
1879 Levy, Augustus H.	1874 Merrall, William J.
1852 Myers, Col. T. Bailey. (L. F.)	1874 McMahon, Gen. M. T.

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| 1874 Moulton, Clarence F.                | 1874 Ottendorfer, Oswald.         |
| 1874 Miller, Geo. Macculloch.            | 1874 Osgood, Franklin.            |
| 1875 Marshall, F. Pelham.                | 1874 Olyphant, Robert M.          |
| 1875 Mitchell, Edward.                   | 1874 Oakley, E. Benedict.         |
| 1875 Macy, Arthur.                       | 1874 Owen, Frederick N.           |
| 1875 Marcus, Arnold.                     | 1875 Otterbourg, Marcus.          |
| 1875 Meyer, Theo. F. H.                  | 1875 Ottiwell, John D.            |
| 1875 Mott, Henry A., Jr.                 | 1875 O'Connor, Thomas H.          |
| 1875 Michler, Gen. Nathaniel, U.S.A.     | 1875 Opdyke, William S.           |
| 1875 Monheimer, Joseph A.                | 1876 Olmsted, Fred'k Law.         |
| 1875 Magoun, George C.                   | 1876 Olmstead, Dwight H.          |
| 1875 Maclay, Moses B.                    | 1877 O'Gorman, Richard.           |
| 1875 Martin, Bradley.                    | 1877 Ogden, Isaac C., Jr.         |
| 1875 Meyer, L. H.                        | 1878 Osgood, Prof. Howard.        |
| 1875 McLanahan, Geo. William.            | 1879 Osborn, Henry F.             |
| 1876 Mitchell, W. Howard.                | 1879 O'Gorman, Richard, Jr.       |
| 1876 Mitchell, Edwin P.                  | 1879 O'Brien, Thomas.             |
| 1876 Mattson, Morris, M.D.               | 1852 Prime, Frederick. (L. F.)    |
| 1877 Morton, Wm. J., M.D.                | 1852 Poor, Henry V. (L. F.)       |
| 1877 Matsell, George W.                  | 1852 Pierrepont, Henry E. (L. F.) |
| 1878 Morison, John C.                    | 1855 Pierrepont, Edwards.         |
| 1878 Merrick, William H.                 | 1857 Pyne, Percy R.               |
| 1878 Montant, Alphonse.                  | 1859 Purser, George H.            |
| 1878 Motley, James.                      | 1859 Prime, Fred'k E. (L. F.)     |
| 1878 Musgrave, Thomas B.                 | 1860 Phelps, Royal. (L. F.)       |
| 1878 Mason, Lieut. T.B.M., U.S.N. (L.F.) | 1862 Phillips, George W.          |
| 1879 Marshall, William I.                | 1868 Powers, William P.           |
| 1879 Mather, Frederick E.                | 1868 Paulison, John P.            |
| 1879 Motz, Ferdinand.                    | 1868 Parton, James.               |
| 1879 Miller, John Bleecker.              | 1871 Potter, Howard.              |
| 1879 Monteith, James.                    | 1871 Peabody, Charles A.          |
| 1859 Norrie, Adam. (L. F.)               | 1872 Parish, Henry.               |
| 1870 Neilson, William H.                 | 1873 Plum, Elias.                 |
| 1873 Neilson, Frederic.                  | 1874 Parker, Willard, M.D.        |
| 1874 Nourse, Prof. J. E.                 | 1874 Peake, William I.            |
| 1874 Newell, John.                       | 1874 Peckham, Walton H.           |
| 1874 Neergaard; Wm.                      | 1874 Peabody, Arthur J.           |
| 1874 Niles, William W.                   | 1874 Penfold, William Hall.       |
| 1874 Nones, Alexander.                   | 1874 Phelps, I. N.                |
| 1874 Newcombe, Isaac B.                  | 1874 Phoenix, S. Whitney. (L. F.) |
| 1875 Newton, Gen. John, U. S. Army.      | 1874 Potter, Orlando B.           |
| 1875 Northrop, A. L.                     | 1874 Pondir, John.                |
| 1868 Ogden, Alfred.                      | 1874 Popham, William H.           |
| 1869 O'Conor, Charles.                   | 1874 Parsons, George W.           |
|  | 1874 Paris, Sherman.              |

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| 1874 Pastor, Henry.                | 1874 Richard, Charles B.          |
| 1874 Preble, John Q.               | 1874 Rhoades, John H.             |
| 1874 Porter, John K.               | 1874 Ramsey, Charles G.           |
| 1874 Packer, Elisha A.             | 1874 Ransom, F. A.                |
| 1874 Powers, George J.             | 1874 Rhoades, Lyman.              |
| 1874 Pellew, Henry E.              | 1875 Roosevelt, Clinton.          |
| 1874 Prichard, William M.          | 1875 Robinson, Henry E.           |
| 1875 Prentice, W. P.               | 1875 Rives, G. L.                 |
| 1875 Pope, Gen. John, U. S. Army.  | 1875 Roberts, Nathan B.           |
| 1875 Pfund, Anton.                 | 1875 Read, J. Meredith.           |
| 1875 Peipers, Hugo.                | 1875 Ranft, Richard.              |
| 1875 Porter, Gen. Horace.          | 1875 Raht, Edward E.              |
| 1876 Perkins, George W.            | 1875 Rose, Charles.               |
| 1876 Parsons, Levi.                | 1875 Rosenfeld, Isaac.            |
| 1876 Peet, William E.              | 1876 Ross, William B.             |
| 1876 Plum, James R.                | 1877 Rose, Theodore.              |
| 1876 Palmer, Gen. W. J.            | 1877 Rice, A. Thorndike.          |
| 1877 Prime, Rev. Wendell, D.D.     | 1877 Roome, William P.            |
| 1878 Parsons, Arthur W.            | 1878 Rogers, Charles H.           |
| 1878 Parsons, Edwin.               | 1878 Roorback, Orville A.         |
| 1878 Prescott, George B.           | 1878 Rainey, Thomas, M.D.         |
| 1879 Peck, Prof. Myron Griffin.    | 1878 Robinson, Thomas H.          |
|                                    | 1879 Redmond, James Morton.       |
| 1854 Ruggles, Samuel B.            | 1879 Rhinelander, Miss J. (L. F.) |
| 1854 Rutherford, L. M.             |                                   |
| 1856 Randolph, Anson D. F.         | 1853 Smith, James O., M.D.        |
| 1856 Remsen, William. (L. F.)      | 1854 Sewell, Henry F.             |
| 1856 Riker, John H.                | 1855 Stuart, Robert L.            |
| 1859 Rapallo, Charles A.           | 1856 Stebbins, Henry G.           |
| 1859 Reckendorfer, Joseph. (L. F.) | 1856 Spofford, Paul N.            |
| 1861 Rogers, C. B. (L. F.)         | 1856 Schermerhorn, Wm. C.         |
| 1868 Raven, Anton A.               | 1856 Sherman, W. Watts.           |
| 1868 Roberts, Marshall O.          | 1859 Schell, Augustus. (L. F.)    |
| 1868 Rose, Cornelius.              | 1859 Schultz, John H. (L. F.)     |
| 1872 Robbins, Chandler. (L. F.)    | 1860 Stout, Francis A. (L. F.)    |
| 1873 Reinhart, B. F. (L. F.)       | 1868 Seward, Clarence A.          |
| 1874 Reid, Whitelaw.               | 1868 Shea, George.                |
| 1874 Rives, Francis R.             | 1869 Savage, John. (L. F.)        |
| 1874 Richard, Auguste.             | 1869 Strebeigh, Robert M.         |
| 1874 Ruggles, Philo T.             | 1870 Schell, Richard. (L. F.)     |
| 1874 Rogers, H. Livingston.        | 1870 Sherwood, John.              |
| 1874 Riley, Charles V.             | 1870 Sistare, George K.           |
| 1874 Riker, William J.             | 1870 Schafer, Samuel M.           |
| 1874 Requa, James M.               | 1870 Schafer, Simon.              |
| 1874 Reynes, Jaime.                | 1870 Seligman, Joseph.            |
| 1874 Renauld, Peter A. H.          | 1870 Seligman, James.             |

- 1870 Seligman, Jesse.  
1870 Stoughton, Charles B.  
1871 Shaler, Gen. Alexander.  
1871 Swan, William H.  
1872 Stern, Myer.  
1872 Stengel, Prof. Frederick.  
1872 Steiger, E.  
1872 Stuyvesant, Rutherford. (L. F.)  
1873 Smith, James M.  
1873 Slevin, Thomas E.  
1873 Sturges, Frederick.  
1873 Spencer, James C.  
1873 Strong, Charles E.  
1873 Scott, Julian. (L. F.)  
1873 Southworth, Alvan S. (L. F.)  
1873 Sturgis, Frank K.  
1874 Stone, Henry.  
1874 Sands, Harry M.  
1874 Steinway, William.  
1874 Storrs, Charles. (L. F.)  
1874 Sands, Philip J.  
1874 Smith, Samuel Drake.  
1874 Squires, Robert.  
1874 Sloan, Samuel.  
1874 Schermerhorn, F. Augustus.  
1874 Stuyvesant, Robert R.  
1874 Scott, Col. Henry L.  
1874 Scudder, Henry J.  
1874 Stuart, Joseph.  
1874 Swarr, David M.  
1874 Stokes, James.  
1874 Strong, W. L.  
1874 Steward, D. Jackson.  
1874 Stevens, Alexander Henry.  
1874 Sherman, Benjamin B.  
1874 Shethar, Samuel.  
1874 Sheafe, J. F.  
1874 Schieffelin, Samuel B.  
1874 Scott, Thomas A.  
1874 Stiger, William E.  
1874 Stillwell, Benjamin M.  
1874 Sawyer, Warren.  
1874 Sands, Andrew H.  
1874 Schaus, William.  
1874 Simpkins, N. S., Jr.  
1874 Spinney, Joseph S.  
1874 Salomon, Edward.  
1874 Sewell, Robert.  
1874 Striker, J. A.  
1875 Stanford, William H.  
1875 Smith, Lewis Bayard.  
1875 Smith, Charles Stewart.  
1875 Stewart, Col. Charles S., U.S.A.  
1875 Sturges, Henry C.  
1875 Schultz, Carl H.  
1875 Stone, Charles Francis.  
1875 Sandford, Elliott. (L. F.)  
1875 Stranahan, J. S. T.  
1875 Schofield, Gen. John M., U.S.A.  
1875 Schieffelin, H. Maunsell.  
1875 Schack, Fred.  
1875 Sherman, Isaac.  
1875 Sibley, Gen. Henry H., U.S.A.  
1875 Schiff, Jacob H.  
1875 Strazburger, Oscar.  
1875 Schlesinger, Alfred.  
1875 Smith, Apollos.  
1875 Smith, Augustine.  
1876 Schem, Prof. Alexander J.  
1876 Smith, Harsen H.  
1876 Sibley, Hiram W.  
1876 Spaulding, Henry F.  
1876 Smith, Dwight, M.D.  
1876 Stryker, Gen. William S.  
1876 Stone, A. B.  
1877 Schuyler, Philip  
1877 Shearman, William P.  
1877 Sanford, Henry S.  
1877 Sanger, Major Joseph P., U.S.A.  
1877 Schaff, Rev. Philip, D.D.  
1878 Scott, James.  
1878 Scott, Thomas.  
1878 Stewart, William Rhinelander.  
1878 Slocum, J. J.  
1878 Sanford, A. Wright.  
1878 Swayne, Judge Noah H.  
1878 Sands, William R.  
1878 Smith, S. Newton.  
1878 Smull, W. P.  
1878 Sabla, Theodore de Joly de.  
1879 Saltus, Edgar Evertson.  
1879 Simion, Leonhard.

1879 Smith, Herbert H.	1879 Thompson, J. P.
1879 Stone, R. C.	1879 Turnbull, Robert J.
1879 Speir, Francis, Jr.	
1879 Stevens, Frederick W. (L. F.)	1876 Uhl, Herman.
1879 Smith, E. Reuel.	
1879 Shields, Prof. Charles W.	1854 Viele, Gen. Egbert L.
1879 Stetson, Francis Lynde.	1868 Van Santvoord, C.
1879 Squires, Grant.	1869 Vanderpoel, Aaron J.
1879 Spencer, Mrs. Catherine L. (L.F.)	1870 Van Brunt, Charles H.
	1874 Voorhis, William.
1855 Tellkampf, T. A., M.D.	1874 Vanderbilt, William H.
1856 Tiffany, Charles L.	1874 Vincent, Frank, Jr.
1856 Townsend, Randolph W.	1874 Vyse, Thomas A., Jr.
1859 Tracy, Charles.	1874 Van Volkenburgh, P.
1868 Taylor, Douglas.	1874 Van Rensselaer, K.
1868 Tilden, Samuel J.	1874 Vail, Henry F.
1870 Tuckerman, Lucius.	1875 Vance, Samuel B. H.
1870 Thomson, James.	1875 Van Buren, John D., Jr.
1872 Tower, Gen. Z. B., U. S. Army.	1875 Valentine, Lawson.
1872 Tracy, William.	1875 Von Post, H. C.
1872 Tyler, Arthur W.	1875 Vanderpoel, A. Ernest.
1874 Thompson, David G. (L. F.)	1875 Verhuven, Henry F.
1874 Tiemann, Peter C.	1875 Von Dorrien, S.
1874 Tefft, Erastus T.	1876 Van Hoesen, George M.
1874 Thorne, Jonathan.	1876 Van Brunt, Cornelius.
1874 Tousey, Sinclair.	1877 Vanderbilt, Cornelius.
1874 Trevor, John B.	1877 Voorhees, Charles H.
1874 Taylor, Alfred J.	1878 Vanderbilt, William K. (L. F.)
1874 Thorne, William H.	1878 Voorhis, John R.
1874 Turner, Herbert B.	1879 Vilas, Royal C.
1874 Terry, Com'r Edward, U.S.N.	
1875 Taintor, Charles M.	1854 Webb, William H.
1875 Thurber, Francis B.	1854 Wetmore, Samuel. (L. F.)
1875 Terry, Gen. Alfred H., U.S.Army.	1854 Witthaus, G. H. (L. F.)
1875 Toel, William.	1856 Westermann, B.
1875 Terbell, Henry S.	1859 Ward, George Cabot. (L. F.)
1876 Tappan, J. Nelson.	1860 Winston, Frederick S.
1876 Trenchard, Edward.	1866 Wendell, Jacob.
1876 Totten, Lieut. George Mansfield, U. S. Navy.	1868 White, Alexander M.
1876 Terry, Rev. Roderick.	1869 Ward, Gen. Elijah.
1877 Thomas, T. Gaillard, M.D.	1869 Weber, Leonard, M.D.
1877 Tillinghast, William H.	1870 Webster, Sidney.
1877 Talcott, James. (L. F.)	1870 Wilson, Gen. James Grant.(L.F.)
1877 Tucker, Rev. William J., D.D.	1870 Wright, E. Kellogg.
1878 Taylor, Rev. Wm. M., D.D.	1870 Weston, Theodore, C.E.
	1870 Ward, T. W.

1872 Wetmore, Wm. Boerum. (L. F.)	1875 Waller, Prof. Elwyn.
1872 Williams, Stephen C. (L. F.)	1875 Whitehead, Com'r Wm., U.S.N.
1872 Wells, Jacob.	1875 White, Loomis L.
1873 Weiner, Joseph, M.D. (L. F.)	1875 Whipple, Lieut. C. W., U.S.A.
1873 Worthen, Wm. E., C.E.	1875 Wissman, J. F.
1874 Weyman, Charles S.	1876 Ward, Roswell B.
1874 White, Lt.-Com. H. C., U.S.N.	1876 Walker, Evan T.
1874 Waite, Chief Justice M. R.	1876 Wedemeyer, A. J. D.
1874 Wheeler, Everitt P.	1876 Wrigley, Henry E., C.E.
1874 Wadsworth, Julius.	1877 Ward, W. S.
1874 Wallack, J. Lester.	1877 Waters, James T.
1874 Wetmore, George P. (L. F.)	1877 Woodruff, Col. D., U.S.A.
1874 Wales, Salem H.	1878 Whitehead, Henry M.
1874 Willets, Samuel.	1878 Witherbee, S. H.
1874 Wyckoff, Jacob F.	1878 Wells, John W.
1874 Williamson, David B.	1878 Wood, Isaac F.
1874 Wilder, Marshall P.	1878 Watson, William.
1884 Wilkeson, Samuel.	1878 Whittemore, Charles.
1874 Worth, James L.	1878 Whittemore, Thomas W.
1874 Waite, Charles C.	1879 Williams, Richard P.
1874 Walraven, Ira E.	1879 Watson, Francis A. (L. F.)
1874 Wooster, George H.	1879 Woodbury, Charles H.
1875 Work, J. Henry.	1879 Wirths, Maurice.
1875 Wheeler, John V.	1879 Wilcoxson, George.
1875 Willard, Lieut. J. H., U.S.A.	1879 Wolfe, Miss Catherine. (L. F.)
1875 White, Charles Trumbull.	
1875 Wilson, Gen. J. H.	1871 Youngs, Henry I.
1875 Wilcox, Franklin A.	1874 Young, Mason.
1875 Wilkes, George.	1875 Yoshidi, Kiyonari.
1875 Warner, Lewis T., M.D.	1879 Yates, Ellis Samuel.
1875 Windmuller, Louis.	
1875 White, David, C.E.	1874 Zachos, Prof. J. C.
1875 Winslow, Gen. Edward F.	1875 Zollikoffer, Oscar.
1875 Williams, Gen. George B.	

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FELLOWS DECEASED, 1879.

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1876 Amory, Copley.	1874 Owen, Edward H.
1875 Brewerton, Gen. Henry, U.S.A.	1870 Putzel, Mayer.
1874 Cushing, Caleb.	1874 Pell, Robert L.
1874 Cogswell, William L.	1860 Stewart, Alexander.
1874 Dix, Gen. John A.	1874 Scribner, John Blair.
1875 Hodgskin, James B.	1857 Taylor, Bayard.
1868 Leslie, Frank.	1873 Weeks, John A.
1874 McCurdy, Robert H.	1875 Woodruff, Gen. J. H.
1874 Norwood, Andrew G.	1868 Zaborowski, Martin.

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Bureau of Education, Washington, D. C.  
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Cosmos; Guido Coro, Turin, Italy.  
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Geographical Society, Quebec, Canada.  
Geographical Society, Metz, Germany.  
Geographische Anstalt, Gotha, Germany.  
Geological Society, Edinburgh, Scotland.  
Geological Survey, Montreal, Canada.  
Gesellschaft für Erdkunde zu Berlin, Germany.  
Gewerbeschule, Bistritz, Austria.  
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Historical Society, Madison, Wis.  
Hungarian Academy of Sciences, Pesth, Hungary.  
Hydrographic Office, London.  
Imperial Russian Geographical Society, St. Petersburg.  
Imperial Royal Academy of Sciences, Vienna.  
Imperial Geographical Society, Vienna.  
Instituto Historio Geografico del Rio de la Plata, Buenos Aires, S. A.  
Institut Geographique International, Berne, Switzerland.  
Kais. Königl. Geologische Reichsanstalt, Vienna.  
Königl. Gesellschaft der Wissenschaften, Gottingen, Germany.  
König-Sächs. Gesellschaft der Wissenschaften, Leipzig, Germany.  
L'Exploration, Paris.  
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Library Department of State, Washington, D. C.  
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Literary and Philosophical Society, Manchester, England.  
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N. Y. State Library, Albany.

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New York Academy of Sciences, New York.  
Pulkowa Observatory, Pulkowa, Russia.  
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Revue de Geographie, Paris.  
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Verein von Freunden der Erdkunde, Leipzig, Germany.  
Victoria Institute, or Philosophical Society of Great Britain, London.  
Zeitschrift für Geographie, Lahr, Baden, Germany.

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PART I.

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TRANSACTIONS

OF THE

SOCIETY FOR THE YEAR 1879.

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PART II.

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PAPERS READ BEFORE THE SOCIETY  
DURING 1879.

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*Note.—THE AUTHORS ALONE ARE RESPONSIBLE FOR THE CONTENTS OF  
THEIR RESPECTIVE PAPERS.*

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# American Geographical Society.

No. 11 West 29th Street.

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## THE OBJECTS OF THE SOCIETY.

THE OBJECTS OF THE SOCIETY are to encourage geographical exploration and discovery; to investigate and disseminate new geographical information by discussion, lectures and publications; to establish in the chief maritime city of the country, for the benefit of commerce, navigation, and the great industrial and material interests of the United States, a place where the means will be afforded of obtaining accurate information for public use of every part of the habitable globe. The Society has been in existence twenty-nine years. It has a geographical library of thirteen thousand volumes, and a large and very valuable collection of Maps, Charts, and Atlases relating to every part of the world. It publishes a Bulletin, an annual Journal, and co-operates and interchanges information with one hundred and twenty domestic and foreign Geographical and other Scientific Societies.

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1879.]

BULLETIN

[NO. 1.

OF THE

AMERICAN GEOGRAPHICAL SOCIETY,

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## ANNUAL ADDRESS:

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THE

EARLY HISTORY OF CARTOGRAPHY,

OR

WHAT WE KNOW OF MAPS AND MAP-MAKING  
BEFORE THE TIME OF MERCATOR.

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BY

CHARLES P. DALY, LL.D.

President of the Society.

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NEW YORK:  
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# BULLETIN

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